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Economy Flat in February

Favorable Forecast for Following Months

Coincident economic indicators for February show the Pennsylvania economy maintaining previously attained levels while making few further advances. But leading indicators promise growth in the months to follow.

The Pennsylvania Composite Index of Coincident Indicators slipped a slight 0.2 percent in February. Two of the three components of the index fell: slight declines in total resident employment and the manufacturing job level were tempered by a small gain in real weekly earnings of factory workers.

The index is heavily weighted by the manufacturing sector and, therefore, may not appropriately reflect the counterbalancing strength of the state's service sector.

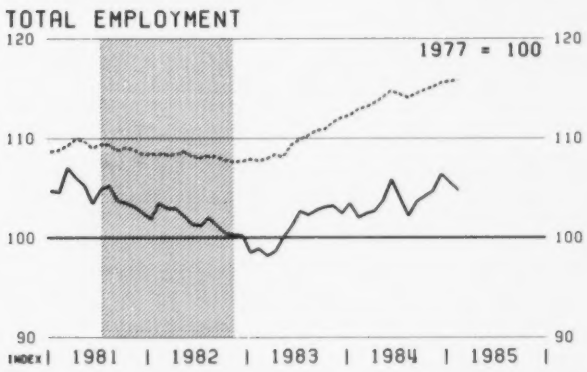
We are looking for improving economic conditions in the spring. The Pennsylvania Composite Index of Leading Indicators, which typically moves up or down before general economic activity, rose a whole percentage point in February following a revised increase of 0.3 percent in January.

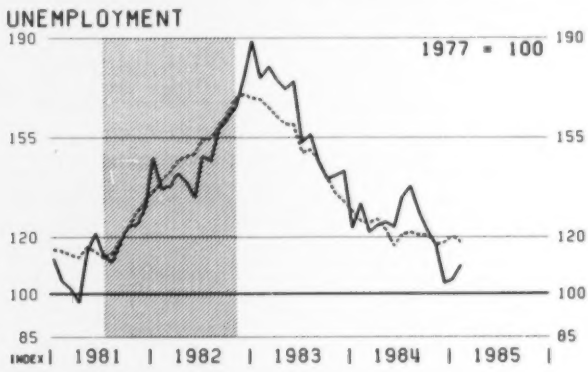
All three components of the index — average weekly hours worked in manufacturing industries, the value of residential building contract awards and new claims for unemployment compensation — contributed to February's increase, which was the largest percentage gain in the index since March 1983.

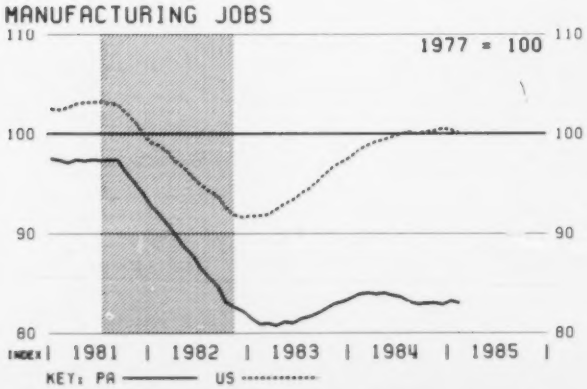
Total resident employment fell in February for the second consecutive month. Employment typically falls in January and February, but this year's declines were slightly more than usual. Nevertheless, the number of employed Pennsylvanians remained 2.6 percent above the level of a year earlier.

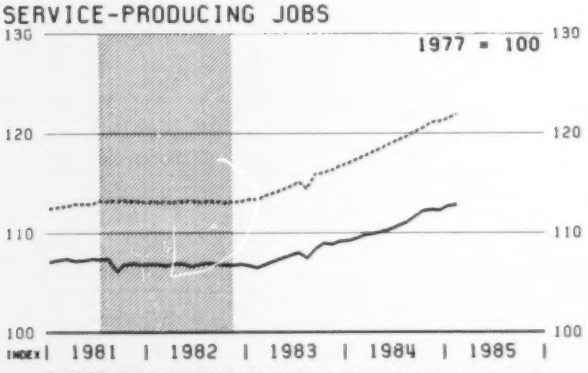
At the same time, the number of unemployed state residents rose, and the number of residents participating in the labor force dropped. Together these two shifts brought the seasonally adjusted unemployment rate up to 8.2 percent from 7.7 percent in January.

The establishment survey suggests that the state's economy was flat in February. The survey shows no net gains in the total job level. The decline in the factory job level, coupled with a more than seasonal drop in









PENNSYLVANIA BUSINESS SURVEY

College of Business Administration The Pennsylvania State University **April 1985**

construction employment, offset seasonally adjusted gains in mining, transportation, public utilities, wholesale trade and service industries.

Furthermore, despite the slight 0.3 percent decline in the seasonally adjusted factory job level, manufacturing activity remained essentially unchanged in February: total weekly person-hours worked were the same as in January after seasonal adjustment.

The small gain in the average weekly earnings of factory workers increased total weekly payrolls by a seasonally adjusted 0.7 percent in February, but no improvement was registered against the year-earlier figure. In addition, after adjustment for inflation, manufacturing payrolls show a 3.6 percent drop from February to February.

Sales of electricity to industrial users, which is used as a gauge of short-run changes in industrial activity, rose a seasonally adjusted 4.6 percent. February's increase regained much of the loss in electrical power sales incurred during the second half of 1984. But some of the strength in sales was due to unusually cold weather and therefore is temporary.

Pennsylvania's steel mills further increased their average daily output a seasonally adjusted 2.1 percent in February after an increase of 14.7 percent in January. Total national steel production rose only the usual seasonal amount in February, which brought Pennsylvania's share of domestic production up to 14.8 percent from 14.3 percent a month earlier.

Producers have been cautious, waiting for signs of enforcement of the steel trade agreements. Inventories of steel mill shapes were at historically low levels in 1984, averaging only 25.8 million short tons, three-fourths of the 1977 average. The only lower annual average in recent history was the 23.7 million short tons in 1983.

Like steel production, coal production in the state improved early this year but remained at historically low levels. After seasonal adjustment, 7.3 percent more bituminous coal was mined in Pennsylvania during

Continued on back page

Economic Activity in Pennsylvania	1985		1984	Seasonally Adjusted Indexes (1977 = 100) 1985		1984
	Jan.	*Feb.*	*Feb.*	*Jan.*	*Feb.*	*Feb.*
Pennsylvania Industries						
All nonagricultural industries						
No. of wage and salaried jobs (thous.)[1]	4,627.*	4,626.	4,531.	103.3	103.3	101.1
Nonmanufacturing						
No. of wage and salaried jobs (thous.)	3,524.	3,526.	3,414.	111.6	111.7	108.2
Manufacturing						
No. of wage and salaried jobs (thous.)	1,101.	1,099.	1,111.	83.2	83.0	83.9
Ave. wkly. hrs. worked by prod. workers	39.3	39.6	40.2	100.4	101.0	102.5
Total wkly. person-hours worked (mils.)	29.7*	29.8	30.7	79.0*	79.1	81.5
Total wkly. payroll (mil. dols.)	281.0*	282.9	283.5	127.2*	128.1	128.3
Steel production (thous. tons)	999.*	1,015.	1,493.	47.	48.	68.
Industrial electric power sales (mil. kwh)	3,458.	3,653.	3,762.	94.	99.	98.
Mining						
Anthracite coal (thous. net tons)	298.	295.	249.	67.	73.	59.
Bituminous coal (thous. net tons)	4,558.	n.a.	5,438.†	69.	n.a.	84.†
Construction contracts awarded (mil. dols.)						
Total	346.1	316.0	297.9*	164.	200.	172.*
Residential building	124.6	138.1	112.3*	193.	239.	188.*
Other building	168.1	130.4	117.2*	170.	226.	186.*
Nonbuilding (utilities and public works)	53.4	47.4	68.5*	98.	86.	120.*
Employment of Pennsylvania Residents						
Employed, no. of persons (thous.)	4,946.	4,883.	4,757.	105.6	104.8	102.0
Unemployed						
No. of persons (thous.)	468.	501.	586.	105.1	110.0	131.6
Rate (percentage of labor force)	8.6	9.3	11.0			
Rate, seasonally adjusted	7.7	8.2	9.8			
Civilian labor force, no. of persons (thous.)	5,414.	5,384.	5,343.	105.6	105.2	104.3
Initial claims for unemployment benefits	212,971.	113,932.	112,169.	101.8	92.1	86.8

Consumer Prices, all items	Urban Indexes (1967 = 100) 1985		1984	Percentage Change *Month*	*Year*
	Jan.	*Feb.*	*Feb.*	*Ago*	*Ago*
U.S. city average	316.1	317.4	306.6	+0.4	+3.5
Philadelphia	306.3	309.2	296.4	+0.9	+4.3
Pittsburgh	n.a.	323.8	315.5	n.a.	+2.6
Northeast PA	301.5	n.a.	291.0†	n.a.	+3.6

NOTES: Data on employment, payrolls and hours have been revised to first quarter 1984 benchmarks.
[1] Total includes workers on strike. * = figure revised † = figure for January 1984 n.a. = data not available
SOURCES AND DEFINITIONS OF DATA ARE AVAILABLE ON REQUEST.

Pennsylvania's Female-male Unemployment Margin

Effects of Changes in Industry Employment

In 1982, the U.S. male unemployment rate exceeded the female rate for the first time since these data were recorded beginning in 1947.[1] The male jobless rate stayed above the female rate in 1983 but dropped below it again in 1984. For Pennsylvania, the reversal in unemployment rates occurred one year earlier and persisted through 1984.

This reversal marks a significant change in the relationship between male and female unemployment rates. Because men tend to be concentrated in goods-producing industries (manufacturing, mining and construction) which are most sensitive to the business cycle, the female-male unemployment rate differential narrows during recessions and widens during recoveries.

But the recent reversal in unemployment rates is a result not only of the severe 1981-82 recession but also of the secular growth differentials among industries. Between 1972 and 1984, employment in Pennsylvania grew most rapidly in those industries which employ the highest proportions of women — service industries, finance, insurance and real estate industries, and trade industries.

This trend in industry growth rates has been a major cause of the reversal in the male and female unemployment rates and would have had a greater impact had there not also been shifts in the female-male employment composition within industries and a more rapidly expanding female labor force compared to the male labor force.

Some of the unemployed male factory workers have obtained employment in the service-producing sector while others have left the work force. Both of these changes cause the male unemployment rate to be lower than it would have been in their absence and therefore have moderated the magnitude of the differential in male jobless rates over female rates.

Employment in Pennsylvania by Sex

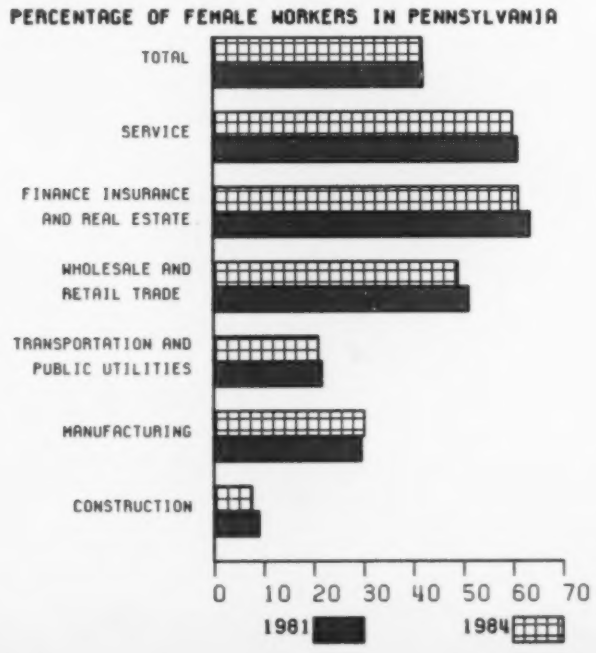
	1981	1982	1983	1984
Unemployment Rates				
Male	8.8	12.3	13.3	9.3
Female	7.8	9.0	9.7	8.8
Labor Force Participation Rates				
Male	74.7	73.4	73.7	72.5
Female	47.5	48.1	47.6	48.0

Whether employment trends continue to improve the unemployment situation of women relative to men depends to a large extent on the future growth rates of industries with a higher concentration of women versus those with a higher concentration of men. The growth rates among industries between 1984 and 1990 implied by the Pennsylvania Office of Employment Security projections of employment show the goods-producing sector with the greater relative growth and therefore do not suggest further continued improvement of the unemployment rate of women relative to men's.[2]

However, these projections were based on data that did not fully account for the recent contraction in the state's manufacturing industries and therefore overstate the growth rate in this sector. In addition, they do not reveal interindustry mobility or labor force mobility patterns.

Thus, the future trend of the female-male unemployment rate differential is not clear. However, the most plausible scenario is for the male rate to continue to move closer to the female rate and drop below it if the current cyclical recovery lasts long enough, and for the female rate to again be lower than the male rate in the next recession.

— Norma I. Gavin



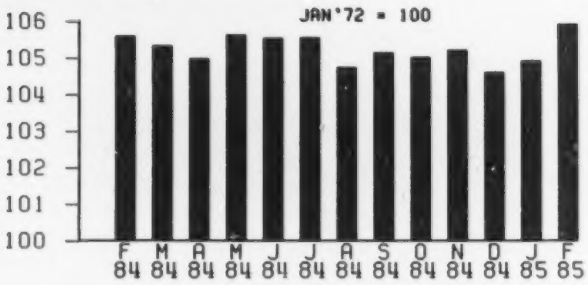
[1] DeBoer, Larry and Michael Seeborg, "The Female-male Unemployment Differential: Effects of Changes in Industry Employment," *Monthly Labor Review* (November 1984), pp. 8-15.

[2] Pennsylvania Office of Employment Security, *Pennsylvania Industry Trends and Outlook — 1980 and Projected 1990*, (Fall 1983).

Employment in Pennsylvania by Major Industry Group

	1984 Average Employment	Percentage Change 1972-84	Projected 1984-90
Construction	175.7	-13.5	16.1
Manufacturing	1,101.0	-23.8	17.2
Transportation and Public Utilities	246.2	-7.4	25.0
Wholesale and Retail Trade	1,032.8	20.8	10.4
Finance, Insurance and Real Estate	253.5	26.4	8.5
Services	1,108.3	50.0	13.4
Total	4,653.4	5.6	11.3

Pennsylvania Composite Index of Leading Indicators



January compared to a month earlier, but production was still 16.2 percent below the year-earlier figure. Anthracite coal production was unchanged for the second consecutive month. But since lowered production levels are typical in January and February, the seasonally adjusted level rose 9.9 percent in January and 8.9 percent in February.

Employment in Pennsylvania's mines did not drop as much as expected in February, which brought the seasonally adjusted index for this measure to its highest level since November 1982.

The seasonally adjusted level of employment in construction industries dipped in February for only the second time since May 1983. However, February's drop is a temporary hold up; awards for future construction projects continued strong that month.

February is historically a slow month for contract construction awards, but it was not as slow as expected this year or last year. The seasonally adjusted value of total contract awards rose 22.4 percent in February from January and was 16.2 percent above the February 1984 value.

Residential building awards rose a seasonally adjusted 24.1 percent during February while nonresidential awards were up 33.2 percent. The only major structure class to decline that month was the highly volatile nonbuilding category, which fell 12.3 percent after seasonal adjustment.

Construction is not the only major industry group expected to have employment gains this spring. Two broader-based leading employment indicators reversed their poor January showing in February.

The seasonally adjusted index of initial claims for unemployment compensation dropped to 92.1 after rising above 100 in January for the first time in 17 months. A value of 100 is given to the average level prevailing in 1977.

Also, average weekly hours worked by production workers in both durable and nondurable goods factories increased in February. The length of the factory workweek had slipped in December and January. This measure is considered a leading employment indicator because businesses will first increase the hours worked by current employees before hiring new workers.

Finally, inflation continued to stay under control nationwide while heating up somewhat in the Philadelphia area, where much of the state's economic growth has been concentrated.

— Norma I. Gavin

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Eugene J. Kelley, Dean of the College
Paul H. Rigby, Assistant Dean and Director of the Center for Research
Rodney A. Erickson, Director of the Pennsylvania Economic Analysis Program and Associate Director of the Center for Research
Norma I. Gavin, Editor
Doris Bickle, Staff Assistant
Valeria J. Martin, Office Manager
Sheri A. Coval, Subscription Coordinator
Robert C. Ferrara, Graduate Assistant
Shahab Gerami, Graduate Assistant

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The Pennsylvania State University
University Park, PA 16802

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